

**2019-20 NC Check-In 1**  
**Grade 3 Mathematics**  
**State Item Statistics**

|   | Content Standard |  | Item # | Depth of Knowledge | Percent Correct by Item |
|---|------------------|--|--------|--------------------|-------------------------|
| <b>Numbers and Algebraic Thinking</b>     | <b>3.OA.1</b>    | For products of whole numbers with two factors up to and including 10:<br><ul style="list-style-type: none"> <li>Interpret the factors as representing the number of equal groups and the number of objects in each group.</li> <li>Illustrate and explain strategies including arrays, repeated addition, decomposing a factor, and applying the commutative and associative properties.</li> </ul>   | 1      | Skill/Concept      | 88.4                    |
|   |                  |  | 2      | Skill/Concept      | 89.7                    |
|   |                  |  | 3      | Recall             | 72.6                    |
|   |                  |  | 15^    | Recall             | 67.9                    |
|   |                  |  | 16^    | Recall             | 75.6                    |
|   | <b>3.OA.3</b>    | Represent, interpret, and solve one-step problems involving multiplication and division.<br><ul style="list-style-type: none"> <li>Solve multiplication word problems with factors up to and including 10. Represent the problem using arrays, pictures, and/or equations with a symbol for the unknown number to represent the problem.</li> <li>Solve division word problems with a divisor and quotient up to and including 10. Represent the problem using arrays, pictures, repeated subtraction and/or equations with a symbol for the unknown number to represent the problem.</li> </ul> | 4      | Skill/Concept      | 82.7                    |
|   |                  |  | 5      | Recall             | 87.6                    |
|   |                  |  | 19^    | Recall             | 84.0                    |
|   |                  |  | 20^    | Skill/Concept      | 65.1                    |
|   |                  |  | 23^    | Recall             | 83.5                    |
|   | <b>3.OA.8</b>    | Solve two-step word problems using addition, subtraction, and multiplication, representing problems using equations with a symbol for the unknown number.  | 9      | Skill/Concept      | 55.7                    |
|   |                  |  | 10     | Skill/Concept      | 51.3                    |
|   |                  |  | 13     | Skill/Concept      | 51.6                    |
|   |                  |  | 14     | Skill/Concept      | 64.2                    |
|   |                  |  | 24^    | Skill/Concept      | 32.0                    |
| <b>Numbers and Operations in Base Ten</b> | <b>3.NBT.2</b>   | Add and subtract whole numbers up to and including 1,000.<br><ul style="list-style-type: none"> <li>Use estimation strategies to assess reasonableness of answers.</li> <li>Model and explain how the relationship between addition and subtraction can be applied to solve addition and subtraction problems.</li> </ul> Use expanded form to decompose numbers and then find sums and differences.   | 6      | Skill/Concept      | 50.9                    |
|   |                  |  | 7      | Skill/Concept      | 59.3                    |
|   |                  |  | 8      | Skill/Concept      | 52.3                    |
|   |                  |  | 11     | Skill/Concept      | 49.7                    |
|   |                  |  | 12     | Skill/Concept      | 66.7                    |
| <b>Measurement and Data</b>               | <b>3.MD.3</b>    | Represent and interpret scaled picture and bar graphs:<br><ul style="list-style-type: none"> <li>Collect data by asking a question that yields data in up to four categories.</li> <li>Make a representation of data and interpret data in a frequency table, scaled picture graph, and/or scaled bar graph with axes provided.</li> <li>Solve one and two-step “how many more” and “how many less” problems using information from these graphs</li> </ul>  | 17^    | Recall             | 57.4                    |
|   |                  |  | 18^    | Skill/Concept      | 69.5                    |
|   |                  |  | 21^    | Recall             | 82.6                    |
|   |                  |  | 22^    | Skill/Concept      | 80.4                    |
|   |                  |  | 25^    | Skill/Concept      | 55.1                    |

^ Students had access to a calculator when completing items marked with a ^.

Note: Results from NC Check-Ins should not be compared across interims, districts, or the state.

Each math grade 3 NC Check-In assesses different content standards.